

**Amendments to the Claims:**

1. **(Currently amended)** A reciprocating compressor comprising:

(a) a motor unit;

(b) a compressing unit disposed over said motor unit and including:

(b-1) ~~a compressing room~~ compression chamber;

(b-2) a piston ~~reciprocating disposed for reciprocation in said compressing room~~ compression chamber; and

(b-3) a crankshaft for converting rotating action of said motor unit into reciprocating action of said piston; and

(c) an enclosed container ~~for accommodating said motor unit and said compressing unit and~~ having a lubricant oil pooling portion for pooling lubricant oil,

wherein said crankshaft ~~including~~ includes:

(b-3-1) a centrifugal pump disposed at a lower section of said crankshaft and ~~being open opening~~ into the lubricant oil pooled in pooling portion of said container; and

(b-3-2) a pair of spiral pumps, functionally independent, disposed at a middle section of said crankshaft, ~~communicating fluidically connected~~ with said centrifugal pump, and having leading grooves running in ~~an opposite direction~~ directions to each other,

wherein a pair of vertical holes, functionally independent, are ~~prepared~~ provided at an upper section of said crankshaft, ~~the pair of said~~ vertical holes ~~open opening~~ into said container and ~~communicate fluidically connected~~ with said spiral pumps, respectively.

2. **(Currently amended)** The reciprocating compressor of claim 1, wherein said centrifugal pump includes a throttle section ~~which communicates with,~~ disposed in said lubricant oil pooling portion, for allowing the lubricant oil pooled in said container to be drawn into said centrifugal pump, and a hollow cylinder extending upward from a lower end of said crankshaft and having an axis slanting toward an outer wall of said crankshaft.

3. **(Currently amended)** The reciprocating compressor of claim 1, wherein a vent hole ~~communicating with said container~~ is provided at an upper section of said centrifugal pump and opens into said container.

4. **(Currently amended)** The reciprocating compressor of claim 1, wherein said crankshaft further includes an eccentric shaft, a sub-shaft section and a main-shaft section which ~~sandwich~~ vertically sandwich the eccentric shaft,

wherein said compressing unit includes a sub-bearing and a main-bearing, both of which are formed to cross with an axis of said ~~compressing room~~ compression chamber at ~~substantial~~ substantially right angles, for supporting said sub-shaft section and said main-shaft section respectively, and a linking section that links said piston to said eccentric shaft.

5. **(Currently amended)** The reciprocating compressor of claim 4, wherein a pair of helical grooves, functionally independent, are ~~prepared~~ provided on an outer wall of said ~~sub-bearing sub-shaft section~~, said helical grooves ~~include~~ including leading grooves running in ~~an~~ opposite ~~direction~~ directions to each other and ~~communicate~~ fluidically connected with the pair of vertical holes respectively, said helical grooves themselves serving to pump the lubricating oil upwardly.

6. **(Original)** The reciprocating compressor of claim 1, wherein said motor unit is a three-phase induction motor.

7. **(Original)** The reciprocating compressor of claim 1, wherein said motor unit is a single-phase resistant-start induction motor.

8. **(New)** The reciprocating compressor of claim 3, wherein said vent hole opens through an upper surface of said centrifugal pump, said upper surface facing upwardly in an axial direction of said crankshaft.

9. **(New)** The reciprocating compressor of claim 5, wherein a thrust bearing is provided over said sub-shaft section, and said helical grooves provided on said sub-bearing serve to pump lubricant oil up from said vertical holes, respectively, and supply the lubricant oil to said thrust bearing.

10. **(New)** The reciprocating compressor of claim 1, wherein a vent hole is provided at an upper section of said centrifugal pump and opens into said container.

11. **(New)** The reciprocating compressor of claim 10, wherein said vent hole opens through an upper surface of said centrifugal pump, said upper surface facing upwardly in an axial direction of said crankshaft.

12. **(New)** The reciprocating compressor of claim 11, wherein a thrust bearing is provided over said sub-shaft section, and said helical grooves provided on said sub-bearing serve to pump lubricant oil up from said vertical holes, respectively, and supply the lubricant oil to said thrust bearing.

13. **(New)** A reciprocating compressor comprising:  
an enclosed container having a lubricant oil pooling portion to allow for pooling of lubricant oil therein;  
a motor unit disposed in said container;  
a compressing unit disposed in said container over said motor unit and being arranged to be driven by said motor unit;

wherein said compressing unit includes a cylinder block, a compression chamber formed in said cylinder block, a piston disposed for reciprocation in said compression chamber, and a crankshaft operably coupled to said piston and said motor unit to cause reciprocation of said piston upon rotating action of said motor unit;

wherein said crankshaft includes a lower, main section coupled with said motor unit, a middle, eccentric section disposed above said main section and coupled to said piston, and an upper, sub-shaft section disposed above said eccentric section;

wherein a lower, main bearing is provided about said main section of said crankshaft to rotatably support said crankshaft at said main section thereof;

wherein an upper, sub bearing is provided about said sub-section of said crankshaft to rotatably support said crankshaft at said sub-shaft section thereof;

wherein said main section of said crankshaft has a fluid suction path formed therein and opening into said lubricant oil pooling portion of said container;

wherein said main section of said crankshaft has a pair of first spiral pump grooves formed in an outer surface thereof, said first spiral pump grooves being fluidically connected to said fluid suction path and being functionally independent of one another;

wherein said eccentric section of said crankshaft has a pair of vertical holes formed therein, said vertical holes being fluidically connected to said first spiral pump grooves, respectively, and said vertical holes being functionally independent of one another;

wherein said sub-shaft section of said crankshaft has a pair of second spiral pump grooves formed in an outer surface thereof, said second spiral pump grooves being functionally independent of one another and operable to pump the lubricant oil upwardly; and

wherein said second spiral pump grooves are fluidically connected to said vertical holes, respectively, such that a first one of said vertical holes is arranged to independently feed lubricant oil from a first one of said first spiral pump grooves to a first one of said second spiral pump grooves, and such that a second one of said vertical holes is arranged to independently feed

lubricant oil from a second one of said first spiral pump grooves to a second one of said second spiral pump grooves.

14. **(New)** The reciprocating compressor of claim 13, wherein  
said main bearing and said sub bearing have axes that are substantially  
perpendicular to an axis along which said piston is arranged to reciprocate in said compression  
chamber.

15. **(New)** The reciprocating compressor of claim 13, wherein  
said fluid suction path formed in said main section of said crankshaft constitutes a  
slant path slanted relative to an axis of said main section of said crankshaft, said slant path  
constituting a centrifugal pump.

16. **(New)** The reciprocating compressor of claim 13, wherein  
said main section of said shaft has a vent hole formed in an upper section thereof  
and opening into said container.

17. **(New)** The reciprocating compressor of claim 16, wherein  
said main section of said shaft has an upwardly facing surface facing upwardly in an axial  
direction of said crankshaft; and  
said vent hole opens through said upwardly facing surface of said main section of said  
shaft.